

IN THE CLAIMS

1-53 (canceled)

54. (withdrawn) An artificial peptide or polypeptide comprising a conformationally discriminating epitope (CDE) in its native conformation, wherein the CDE is structurally stabilized by circularization.

55. (withdrawn) The peptide or polypeptide claim 54, comprising artificial or glycosylated amino acids.

56. (withdrawn) The peptide or polypeptide claim 54, conjugated to a carrier molecule.

57. (withdrawn) The peptide or polypeptide of claim 54 comprising a CDE of an Fc receptor.

58. (withdrawn) The peptide or polypeptide of claim 57 comprising a CDE of Fc γ RIIb or Fc γ RIIa, the CDE comprising at least one residue which is unique to either Fc γ RIIb or Fc γ RIIa.

59. (withdrawn) The peptide or polypeptide of claim 58, wherein the CDE comprises amino acids 27 to 30, or amino acids 127 to 135 or amino acids 160 to 171 of Fc γ RIIb of SEQ ID NO: 2 or the corresponding amino acids of Fc γ RIIa of SEQ ID NO: 1, or the amino acid sequence of SEQ ID NO: 3.

60. (withdrawn) The peptide or polypeptide of claim 57 conjugated to Fc γ RIIb or Fc γ RIIa.

61. (withdrawn) A method of producing a peptide carrying a conformationally discriminating epitope (CDE) for the generation of antibodies specifically recognizing a protein of interest carrying such an epitope, comprising:

- (a) providing a protein of interest,

- (b) identifying a CDE on said protein,

- (c) producing a peptide comprising the sequence of the CDE,

- (d) structurally stabilizing the peptide by circularization so that the CDE is present in its native conformation.

62. (withdrawn) The method of claim 61, wherein the circularization of the peptide is achieved by generating cysteine bridges, or by bridging amino acid side chains that form a pseudopeptide.

63. (withdrawn) The method of claim 61, wherein the peptide is generated using amino acids carrying glycosylation moieties which are present on the protein of interest.

64. (withdrawn) The method of claim 61, further comprising:
(e) conjugating the peptide to a carrier molecule selected from haptens, polypeptides, peptides, and the protein of interest.

65. (withdrawn) A peptide or polypeptide comprising a CDE, obtained by the method of claim 61.

66. (withdrawn) A method comprising generating immunomodulatory substances specifically recognizing the CDE in its natural environment by providing the peptide or polypeptide of claim 54 as an immunogen in a environment suitable to generate the substance.

67. (withdrawn) A method comprising immunizing an animal or a transgenic animal expressing human Fc γ RIIa by administering an effective amount of the peptide or polypeptide of claim 59 to a subject in need thereof.

68. (withdrawn) A method comprising generating an antibody that can specifically recognize alleles of the Fc γ RIIa Arg/His polymorphism at position 131 or the Fc γ RIIa Val/Phe polymorphism at position 155 by providing an effective amount of the peptide or polypeptide of claim 59 in an environment effective to a subject to generate the antibody.

69. (withdrawn) A method of producing substances capable of discriminating between an antigen of interest and closely related antigens, comprising immunizing an animal with a peptide or polypeptide according to claim 59 or with a correctly folded peptide derived from Fc γ RIIb or Fc γ RIIa, or both, and isolating the resulting antibodies.

70. (currently amended) A substance that specifically binds to an artificial peptide or polypeptide comprising a conformationally discriminating epitope (CDE) in its native conformation, wherein the CDE is structurally stabilized by circularization, and comprises at least one of amino acids 12, 27, 29, 30, 104, 160 and 171 of the amino acid sequence of Fc γ RIIb according to SEQ ID NO: 2.

71. (currently amended) An antibody that specifically binds to human Fc γ RIIb ~~or Fc γ RIIa~~ in the natural environment of the Fc receptor and does not interfere with immune complex binding to Fc γ RIIb.

72. (previously presented) An antibody of claim 71, that binds with higher affinity to Fc γ RIIb than to Fc γ RIIa.

73. (withdrawn) An antibody or fragment or derivative thereof of claim 71, that binds with higher affinity to Fc γ RIIa than to Fc γ RIIb.

74. (withdrawn) An antibody or fragment or derivative thereof of claim 71, that is able to specifically block IgG binding to human Fc γ RIIb or Fc γ RIIa.

75. (canceled)

76. (withdrawn) An antibody or fragment or derivative thereof of claim 71, that inhibits the physiological function of human Fc γ RIIb or Fc γ RIIa.

77. (withdrawn) An antibody or fragment or derivative thereof of claim 71, that activates the physiological function of human Fc γ RIIb or Fc γ RIIa.

78. (currently amended) An antibody of claim 71, that specifically cross-links human Fc γ RIIb ~~or Fc γ RIIa~~.

79. (previously presented) An antibody of claim 71, that is in a monomeric or multimeric state.

80. (currently amended) An antibody of claim 71, that is capable of binding to a CDE of Fc γ RIIb ~~or Fc γ RIIa~~.

81. (canceled)

82. (currently amended) An antibody according to claim 80 84, that is capable of binding to an epitope of Fc γ RIIb ~~or Fc γ RIIa~~ comprising amino acids 27 to 30, and/or ~~127 to 135, or~~ 160 to 171 of the amino acid sequence of Fc γ RIIb ~~or Fc γ RIIa~~ according to ~~SEQ ID NO: 1 or~~ SEQ ID NO: 2.

83. (previously presented) The antibody of claim 71, that is a polypeptide carrying a complementarity determining region (CDR) which is specific for Fc γ RIIb.

84. (previously presented) The antibody of claim 83, that is a polypeptide carrying one or more of the CDR-sequences according to SEQ ID Nos: 5, 7, 9 and 11.

85. (previously presented) An antibody of claim 71, that is of the class IgG, IgE, IgM or IgA.

86. (previously presented) An antibody of claim 71, that is selected from single chain antibodies, bi-functional antibodies and tri-functional antibodies, Fab fragments, F(ab)₂ fragments, Fv fragments and scv-fragments.

87. (previously presented) An antibody according to claim 71, comprising the variable light or heavy regions of antibody GB3 according to SEQ ID NO: 5 and 7, or a portion thereof having specificity; or the variable light or heavy regions of antibody CE5 according to SEQ ID NO: 9 and 11 or a portion thereof having specificity.

88. (withdrawn) A nucleic acid sequence encoding the peptide of claim 58 or an antibody or fragment or derivative thereof that specifically binds to human Fc_YRIIb or Fc_YRIIa in the natural environment of the Fc receptor.

89. (withdrawn) The nucleic acid of claim 88 encoding the sequence of monoclonal antibodies CE5 or GB3 according to SEQ ID NOs: 4, 6, 8 and 10 or a portion thereof.

90. (withdrawn) A nucleic acid vector comprising the nucleic acid sequence according to claim 88.

91. (withdrawn) A host cell transfected with a vector according to claim 90.

92. (previously presented) A pharmaceutical or diagnostic composition comprising an effective amount of the antibody according to claim 71 and a pharmaceutically acceptable carrier substance.

93. (previously presented) A diagnostic kit for the detection of autoimmune diseases or cancer, comprising the antibody according to claim 71, or a recombinant peptide or polypeptide comprising a conformationally discriminating epitope (CDE) in its native conformation, wherein the CDE is structurally stabilized by circulization.

94. (withdrawn) A method comprising producing an inhibitor or activator of the Fc γ RIIa/IgG interaction or the Fc γ RIIb/IgG interaction by providing the antibody or fragment or derivative thereof of claim 71 in an environment to produce the inhibitor or activator.

95. (withdrawn) A method comprising diagnosing or treating an autoimmune disease, systemic lupus erythematosus, rheumatoid arthritis, immune thrombocytopenic purpura and multiple sclerosis, comprising administering the pharmaceutical or diagnostic composition of claim 92 to a subject in need of diagnosis or treatment of said disease.

96. (withdrawn) A method comprising administering the pharmaceutical or diagnostic composition of claim 92 to a subject in need thereof.

97. (withdrawn) The method of claim 96, wherein said composition is administered as an adjuvant with other biotherapeutics.

98. (withdrawn) The method of claim 97, wherein the other biotherapeutics are selected from the group consisting of antibodies Herceptin®, Rituxan®, IC14, PANOREX™, IMC-225, VITAXINTM, Campath 1H/LDP-03, LYMPHOCIDE™ und ZEVLINT™, and antibodies binding to the following cancer antigens: MAGE-1, MAGE-3, BAGE, GAGE-1, GAGE-2, N-acetylglucosaminyltransferase, p15, beta-catenin, MUM-1, CDK-4, HER-2/neu, human papillomavirus E6, human papillomavirus-E7 and MUC-1.

99. (withdrawn) A method comprising diagnosing or treating an allergy by administering an effective amount of the pharmaceutical composition of claim 92 to a subject in need thereof.

100. (withdrawn) A method comprising treating a disease associated with activated dendritic cells or macrophages by administering an effective amount of the pharmaceutical composition of claim 92 to a subject in need thereof.

101. (withdrawn) A method comprising treating host-versus-graft disease by administering an effective amount of the pharmaceutical composition of claim 92 to a subject in need thereof.

102. (withdrawn) A method comprising treating amyloid linked diseases by administering an effective amount of the pharmaceutical composition of claim 92 to a subject in need thereof.

103. (withdrawn) A method comprising administering to a subject the antibody or fragment or derivative of claim 71, wherein the antibody or fragment or derivative thereof comprises specific anti- Fc γ RIIa fragments in bi-specific antibodies to direct antigens towards transport by thrombocytes and/or uptake by the liver and spleen phagocytosis system of the subject.

104. (withdrawn) A method comprising administering to a subject the antibody or fragment or derivative thereof of claim 71, wherein the antibody or fragment or derivative thereof is a specific anti-Fc γ RIIa antibody or fragment thereof to diagnose or treat ITP in the subject.

105. (withdrawn) A method comprising producing a pharmaceutical composition comprising the antibody or fragment or derivative thereof of claim 71 wherein the pharmaceutical composition increases the effect of vaccination upon administration to a patient.

106. (previously presented) An antibody of claim 71 that is modified in the Fc-fragment by the modification of the glycosylation or mutagenesis to enhance the binding towards subsets of the Fc-receptors.

107. (withdrawn) The method of claim 69, further comprising generating recombinant immunomodulatory substances with antibodies.

108. (withdrawn) A nucleic acid sequence encoding the antibody, fragment or derivative of claim 71.

109. (withdrawn) A nucleic acid vector comprising the nucleic acid sequence according to claim 108.

110. (withdrawn) A host cell transfected with a vector according to claim 109.

111. (withdrawn) The method of claim 96, wherein said cancer is a lymphoma or a leukemia.

112. (previously presented) The antibody of claim 71, wherein the antibody is non-blocking.

113. (new) An antibody of claim 71 that activates the physiological function of human Fc γ RIIb.